# ASSESSMENT AND PLACEMENT: SUPPORTING STUDENT SUCCESS IN COLLEGE GATEWAY COURSES

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## Overview

Evidence is mounting that the vast majority of students who are currently placed into prerequisite remedial education could be successful in gateway college-level courses if they receive additional academic support as a corequisite. Recent research on college placement exams reveals that the exams are unreliable at predicting college success, and adding multiple measures like high school GPA only marginally improves predictability. Because of the exams' poor predictability, there is reason to believe that using assessments to place students into stand-alone remedial education is worse than placing all students into gateway courses.

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While CCA does not advocate for the elimination of academic support for students who are not optimally prepared for higher education, we do believe that most students should receive academic support while enrolled in gateway courses. Creating a placement range that results in the vast majority of students being placed into gateway college-level courses allows colleges to assess the readiness of students for college-level content and design appropriate academic support for students who need it.

## Scaling Corequisite Support for the Vast Majority of Students

With 50% of all new entering students being placed into remedial education and success rates of remedial education students in gateway courses that are alarmingly low[i], there is a growing movement to fundamentally transform remedial education. At the heart of the reforms is an understanding that colleges must recalibrate their measures of success from whether students complete remedial education courses to whether students complete gateway college-level courses.

As a result, many are redesigning their systems to place more students into gateway college courses and provide academic support as a corequisite. With models showing success rates that are three to four times greater than traditional prerequisite remedial education, many states are moving aggressively to implement corequisite academic support at scale. Despite the growing momentum for corequisite support, many are reluctant to place the vast majority of students into corequisite models.

Instead, many are clinging to the notion that only students who are assessed just below college-ready should be allowed access to corequisite models. The problem for colleges is that they don't know exactly where to draw the line for placing students into corequisite remediation. With research indicating that placement exams are ineffective predictors of success in gateway courses, states are developing new assessment practices that incorporate additional measures such as high school GPA and high school transcript information to see if they can draw a more distinct line between who is and is not ready for gateway courses. The expectation of those adding high school GPA and other data into placement decisions is that multiple measures will improve colleges' ability to identify students who can succeed in gateway college-level courses. Unfortunately, the evidence does not support this approach. A further examination of the data finds that high school GPA is only marginally better than placement exams and that high school transcript data is no better than high school GPA in predicting college success. While combining these factors is better, they still don't dramatically improve the predictability of student success in gateway college-level courses.

**"Reforms to assessment and placement practices alone will not dramatically improve college success rates."**

While using multiple measures to redraw the line for determining who is and is not college-ready seems like a sensible approach, it misses the larger lesson learned from the research. Namely that traditional prerequisite remedial education does not work, regardless of student placement. In the end, moving the goal posts in a few yards to allow a small number of students the opportunity to receive corequisite support does not address the larger systemic failure of traditional remediation.

Reforms to assessment and placement practices alone will not dramatically improve college success rates. Instead, assessment and placement should support a fundamental redesign of the system that provides effective support to academically underprepared students while they are enrolled in gateway college-level courses.

## Redesigning Assessment and Placement Practices Will Not Increase Student Success

Much has been made of the research from Judith Scott Clayton on the effectiveness of placement tests for predicting success in gateway math and English courses.[ii] In particular, her conclusion that high school GPA is a more effective predictor of success in gateway math and English courses than placement exams and that combining high school GPA and placement scores are more effective than using either variable independently has lead many states to incorporate the use of multiple measures in their placement practices. While the findings about the use of multiple measures are important, there is much more to her research that people should consider when developing new approaches. Following are some additional findings from Scott-Clayton's paper entitled: "Do High-Stakes Placement Exams Predict College Success?" that are worth noting:

### *Using Multiple Measures Does Not Dramatically Improve Predictability of Student Success in Gateway Courses*

According to the study, a placement exam score accounts for about 13% of the variance when predicting student success rates in college-level math. Adding high school GPA to the equation explains 18% of the variance. When you include the high school a student attended and the number of years since a student attended high school, only 20% of the variance is explained (Scott-Clayton, p. 16). The predictability of success in college courses is even lower in English.

**Bottom Line**: The use of multiple measures will not dramatically improve your ability to predict student success in gateway math or English courses.

### *Multiple Measures Will Not Help Identify which Borderline Students will Pass College-Level Courses*

Many think that using multiple measures will provide clarity about the likelihood students, who are on the borderline between college-ready and not college-ready, will pass gateway courses. Unfortunately, Scott-Clayton finds that any measure of college-readiness becomes less reliable as you attempt to predict whether a student will receive a passing grade (C or better) vs. whether they will perform well in a class (B or better). According to the study, using high school GPA and placement scores explains 17% of the variance among students who complete a gateway math course with a "B" or better. Those measures only explain 11% of the variance for students earning a "C" or better in the gateway math course (Scott-Clayton, p. 16). Using multiple measures does not make it much easier to determine how to place students who are on the borderline of being college ready.

**Bottom Line:** The more precise you need any assessments to be to place students on the borderline of college-readiness into gateway courses, the less reliable the assessment will be.

### *Use of Placement Exams Actually Decreases Success Rates in College Gateway Courses*

One of the most interesting findings from the research occurred when they compared gateway course success rates between placing all students directly in to a gateway math course vs. using a placement exam to place students either in to a gateway course or remediation. Scott-Clayton found using the placement exam, rather than placing all students directly into gateway math courses actually reduces the percent of students who succeed in gateway math courses by 33% (Scott-Clayton, p. 27). Because placement exams result in such a high percent of students being placed into remediation and the failure rate in remediation is so high, placement of all students in gateway courses will theoretically do the most to increase gateway course success.

**Bottom Line:** Colleges would increase the overall percent of students who complete a gateway math course if they dramatically increased the percent of students placed directly into gateway math courses. Combining more liberal placement of students into gateway college courses with corequisite academic support would only improve the likelihood that students will pass gateway courses.

## Creating a Placement Range to Support Success in Gateway Courses

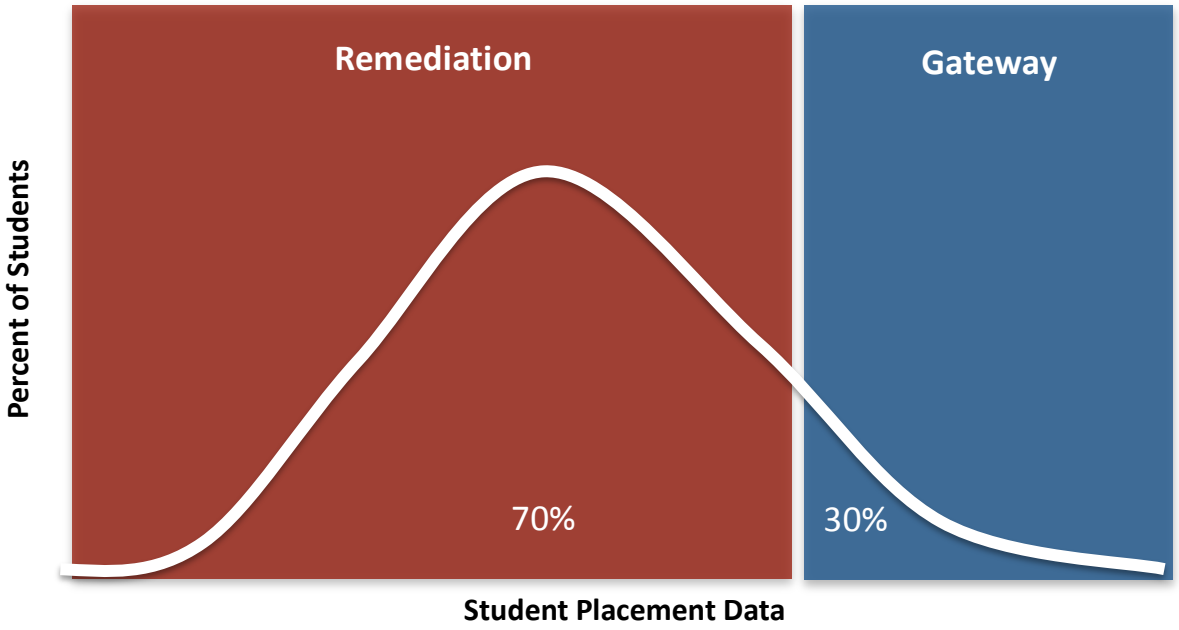
Because there is no reliable way for precisely determining which students can and cannot be successful in gateway college-level courses, it is time to reduce the powerful influence of assessments on student

placement. Instead, colleges should commit to placing the vast majority of students into either gateway courses or gateway courses with corequisite support. Doing so eliminates the unintended consequence of using unreliable assessment tools to place students who could be successful in gateway courses into ineffective standalone remediation.

### *Current Placement Practices are a Losing Proposition for Students*

Current placement practice, which uses a single placement exam cut score or multiple measures to draw a fine line to place students into gateway college courses, is an all-or-nothing proposition. As Figure I illustrates, students who fall on one side of the cut score are given the privilege of enrolling directly into college-level, credit-bearing courses. These students apply their financial aid and tuition dollars to a course that counts toward a college credential. Students who fall on the other side of the line are asked to complete remedial courses that do not count toward a degree, forcing students to spend more money and time on a college education. Consequently, far too many students find that a remediation course is their first and last college course. With remediation rates at many colleges between 50% and 70% and research indicating that upwards of 50% of students placed into remedial education courses could pass a gateway course with a C or better[iii], it seems like many students find themselves on the losing side of the proposition.

**Figure 1: Traditional Remedial Education Placement**

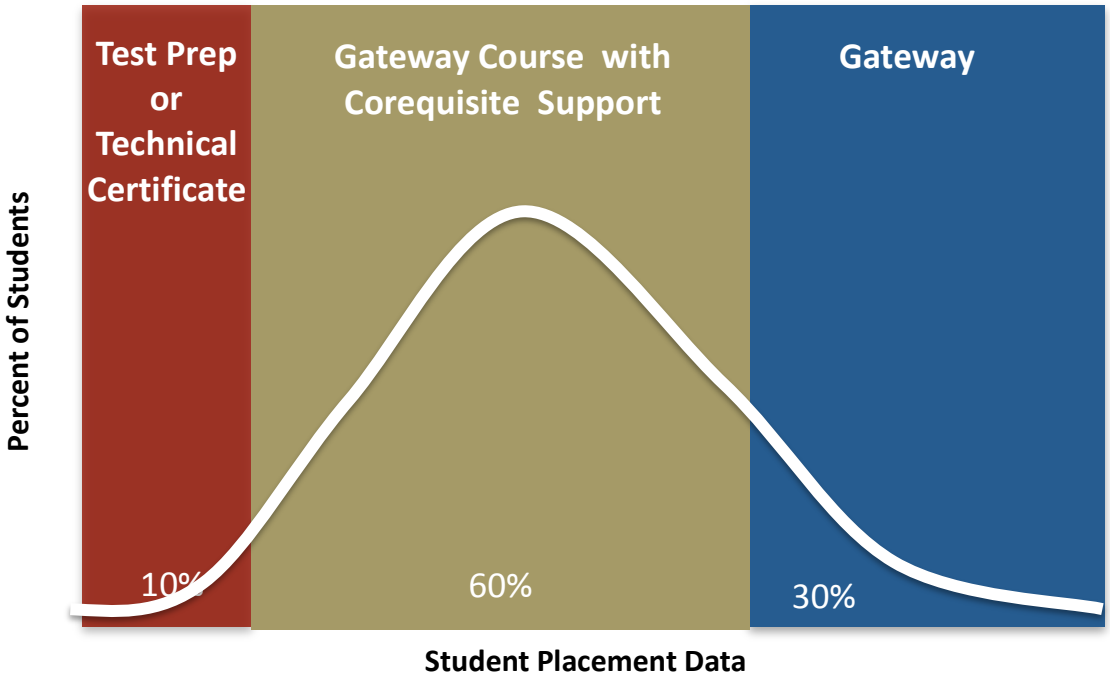



### *A Placement Range Lowers the Stakes of Assessment and Placement*

Creating a placement range that uses assessment data to create two cut points to place the vast majority of students into either gateway college-level courses or gateway college-level courses with corequisite support lowers the stakes by mitigating the negative impact of unreliable assessments. A placement range eliminates the consequence of being placed into remediation and replaces it with students enrolling in a gateway college-level course and getting help. Figure II illustrates how a placement range, where an institution sets two cut points – one point to place students into traditional

gateway college-level courses and a second point to place students into gateway college-level courses with corequisite support would result in the vast majority of students being placed into college-level gateway courses. Doing so eliminates the high-stakes nature of using largely unreliable assessments to place students in non-credit remedial education courses.

**Figure 2: A Placement Range Places Most Students in Gateway-Level Courses**




A placement range shifts the purpose of assessments from whether or not a student should be placed into college-level courses to how best to support them while enrolled in college-level courses. With highly successful corequisite models available to institutions, the placement range becomes a key component of a scaled academic support system for students. Building both one-semester models like the Accelerated Learning Program and two semester models like the California Acceleration Project's Path2Stats course allows colleges to develop customized approaches to meet the needs of a wide range of students.

Even with a placement range, some students will have skills well below high school level, requiring alternative strategies that colleges should employ. The goal should be to address skill deficiencies at your college as rapidly as possible to prepare students for an appropriate corequisite model. Strategies, like pre-college bootcamps, technology enhanced tools, as well as other strategies that can be used to design short, high impact-low cost instruction to support students with skills below high school level.

## In Summary . . .

States that are seeking to reform assessment and placement practices as part of a large-scale reform of remedial education should keep the following in mind:

- *There is no such thing as a perfect test or assessment system.* Research has shown that no single assessment or multiple measure approach will give you the peace of mind you need to make high stakes decisions over placing students in gateway courses or remedial courses.
- *The finer the line you draw on placement decisions, the more unreliable the assessment tools will be.* Assessments are least reliable when trying to make decisions about students who are right on the borderline of being college ready.
- *The negative consequences of placing students in remediation are greater than the risks of placing them in college-level courses and providing academic support.* The data suggest that it is better to be more liberal in your placement policies than to be too conservative. Using a proven strategy of corequisite support will dramatically increase student success.
- *Use a placement range where the vast majority of students are placed in either gateway courses or gateway courses with corequisite support*. Creating a placement range with one cut point for placing students in traditional gateway courses and a second to place students into gateway courses with corequisite support ensures students are not misplaced into remedial courses when they are capable of doing college-level work.
- *Design assessment and placement practices to determine the most appropriate level of support for students in gateway courses*. Assessment results can be used to determine the appropriate type of corequisite support a student should receive.
- *Design low-cost or no-cost accelerated options to prepare students who have basic skills well below high school level.* Strategies should focus on short, competency-based models that enable students to quickly access corequisite interventions.

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[i] Judith Scott Clayton and Olga Rodriguez. "Development, Discouragement, or Diversion? New Evidence on the Effects of College Remediation." NBER Working Paper No. 18328. August, 2012.

[ii] Judith Scott Clayton. "Do High Stakes Placement Exams Predict College Success?" CCRC Working Paper No. 41. New York: Community College Research Center, Teachers College, Columbia University. February, 2012.

[iii] Ibid